

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions or listings of claims for this application.

Listing of Claims:

1. (Currently amended) A oligosaccharide synthesizer comprising:
 - a container for storing buffer solution;
 - a pump for feeding buffer solution;
 - a sample injector ~~further comprising~~ a container for storing a sugar nucleotide solution and a container for storing glycosyltransferase, ~~said buffer solution used to mix~~ injector for mixing said sugar nucleotide solution and said glycosyltransferase and ~~to inject for~~ injecting the mixture into a flow path for feeding said buffer solution;
 - a reaction tank where a primer is immobilized, said tank used for reaction between solution injected out of said sample injector and said primer;
 - an ultrafiltration column for separating said glycosyltransferase from sugar nucleotide and nucleotide; and
 - a collection flow path for feeding said glycosyltransferase flowing out of said ultrafiltration column, into the container for storing glycosyltransferase of said sample injector.
2. (Currently amended) The oligosaccharide synthesizer according to Claim 1 further comprising:
 - a plurality of said containers for storing the buffer solution;
 - a plurality of said collection flow paths provided in ~~response to~~ accordance with the number of said containers for storing the buffer solution; and

a collection flow path switch valve for feeding the solution coming out of said ultrafiltration column into one of said collection flow paths.

3. (Currently amended) The oligosaccharide synthesizer according to Claim 1 comprising:

~~said container for storing buffer solution;~~

~~said pump;~~

~~said reaction tank; and~~

a circulating flow path switch valve arranged between said ultrafiltration columns in order to switch between the flow paths of various sections;

said circulating flow path switch valve characterized by switching between a first flow path for circulation through the reaction tank, circulating flow path switch valve, pump, sample injector and reaction tank; and a second flow path for circulation through the buffer solution container, circulating flow path switch valve, pump, sample injector, reaction tank and ultrafiltration column.

4. (Currently amended) A oligosaccharide synthesizer comprising:

a container for storing buffer solution;

a pump for feeding buffer solution;

a sample injector further comprising:

a container for storing a sugar nucleotide solution,

a container for storing a primer, and

a mixing tank for mixing the sugar nucleotide solution with said primer; wherein the solution mixed by said mixing tank being

injected into the flow path for feeding said buffer solution by said sample injector;
a reaction tank where ~~[[a]]~~said primer is immobilized, said tank being used for reaction between solution injected out of said sample injector and said primer;
an ultrafiltration column for separating said primer from sugar nucleotide and nucleotide or oligosaccharide;
a first flow path for feeding the primer coming out of the ultrafiltration column, into the primer container of said sample injector; and
a second flow path for feeding the sugar nucleotide and nucleotide or oligosaccharide coming out of the ultrafiltration column, into a drain.

5. (Currently amended) The oligosaccharide synthesizer according to Claim 4 comprising:

a plurality of said reaction ~~column~~tanks,
a switch valve arranged between a plurality the said reaction ~~column~~tanks in order to feed the solution injected out of said sample injector, into any one of the reaction ~~column~~tanks.
6. (Currently amended) The oligosaccharide synthesizer according to Claim 5 characterized in that an enzyme for releasing oligosaccharide from said primer is immobilized on one of said reaction ~~column~~tanks.
7. (Currently amended) The oligosaccharide synthesizer according to Claim 6 characterized in that, after solution has passed through the

reaction ~~column~~stanks where said ~~oligosaccharide-release~~ enzyme is immobilized, $[[a]]$ oligosaccharide is collected from said drain.